

### **Remarks**

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Initially, although the office Action Summary page indicates that the Examiner has objected to the drawings, there is no indication in the Office Action of the reasons for the objection. The Examiner confirmed, during a telephone discussion with Applicant's attorney on September 26, 2007, that there is no objection to the drawings.

Claim 1 has been amended to require that the magnetic ferrite exhibits a sudden increase of loss factor  $\mu''$  only in a frequency zone higher than 1 GHz, based on the disclosure at page 2, lines 9-11 of the specification. The other amendments to claim 1 are editorial in nature.

Editorial changes have also been made in claims 2, 3, 5 and 11.

The amendments to claim 10 serve to correct an inadvertent error in this claim, which as set forth in the Preliminary Amendment filed with the application, is directed to an inductance device like original claim 4, whereas it was intended that claim 10 should be directed to an impedance device like original claim 5. Claims 8 and 9 in the Preliminary Amendment are already directed to the inductance device.

The patentability of the presently claimed invention over the disclosures of the references relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Thus, the rejection of claims 1-15 under 35 U.S.C. §103(a) as being unpatentable over Suzuki et al. (JP S47-7821) in view of Ritzen et al. (US 3,709,822) is respectfully traversed.

The present invention provides a magnetic ferrite operating well in the GHz zone. The magnetic ferrite includes iron oxide, cobalt oxide and zinc oxide as the main components and at least one member selected from the group consisting of titanium, tantalum, indium, zirconium, lithium, tin and vanadium. With this constitution, the present invention realizes a magnetic ferrite in which a sudden increase of loss factor  $\mu''$  occurs only in a frequency zone higher than 1 GHz.

Suzuki et al. disclose a cobalt-zinc based ferrite which is a **semi-hard magnetic material** exhibiting a coercive force (Hc) of 35 Oersted or more, a squareness ratio of 75% or more, and a magnetic flux in a magnetic field of 100 Gauss (B<sub>100</sub>) of 3000 Gauss or more (specification).

Therefore Suzuki et al.'s semi-hard magnetic material is clearly different from the magnetic ferrite of the present invention operating in the GHz zone.

Ritzen et al. disclose a **soft-magnetic ferrite core** characterized in that a starting mixture of metal oxides is iron oxide, copper oxide, lithium oxide, zinc oxide and a cobalt oxide.

Thus, the magnetic character of the ferrite of the Ritzen et al. reference, i.e. a **soft-magnetic material**, is complete differently from the magnetic character of the ferrite of the Suzuki et al. reference, i.e. a **semi-hard magnetic material**. These references relate to different fields of endeavor, and therefore Applicant respectfully submits that one of ordinary skill in the art would not combine the reference teachings.

Furthermore, there is no suggestion or motivation in the Ritzen et al. reference to support the Examiner's argument that it would have been obvious to include the lithium of the Ritzen et al. reference in the magnetic ferrite of the Suzuki et al. reference. The Examiner argues that the motivation for combining the references in this manner is "for the purpose of improving magnetic properties." But this argument is not supported by the references themselves. That is, Ritzen et al. fails to disclose any reason for including lithium in the magnetic ferrite, and therefore, one skilled in the art would have no motivation for adding lithium to the magnetic ferrite of the Suzuki et al. reference.

Even if the references were combined in the manner suggested by the Examiner, the result of such combination would still not suggest the presently claimed invention, since even the combination of references does not suggest that the magnetic ferrite exhibits a sudden increase of loss factor  $\mu''$  only in a frequency zone higher than 1 GHz, as required by the present invention.

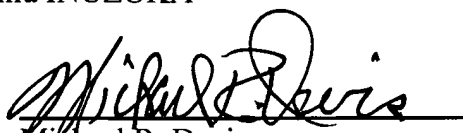
For these reasons, Applicant takes the position that the presently claimed invention is clearly patentable over the applied references.

Therefore, in view of the foregoing amendments and remarks, it is submitted that the ground of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

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By:

A handwritten signature in dark ink, appearing to read "Michael R. Davis", is written over a horizontal line.

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